DOCUMENT RESUME

ED 051 148 SP 007 170

AUTHOR Flynn, Louise
TITLE Yesterday's Minds or Tomorrow's? A Handbook on Creativity.
INSTITUTION Cheyenne Public Schools, Wyo.
NOTE 45p.

EDRS PRICE EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS Art, *Creative Ability, *Creative Development, *Creativity, *Curriculum Guides, Intermediate Grades, Language Arts, Mathematics, Middle Schools, Physical Education, *Primary Grades, Social Studies

ABSTRACT

GRADES OR AGES: K-8, with emphasis on lower grades. SUBJECT MATTER: Creativity. ORGANIZATION AND PHYSICAL APPEARANCE: The greater part of the guide is concerned with the identification and encouragement of creativity. Chapter headings include: Definition of Creativity; The Creative Teacher; What Is the Creative Child Like?; How Can We Identify the Creative Child?; Method of Measuring Creativity; An Evaluation; Use of Creativity To Release Inhibitions and Talents; Evoking Thinking in a Creative Way; Problems of Developing Creativity; What Becomes of the Creative Child?; Subject Matter and Creativity; and Some Important Facilitating Procedures for the Development of Creativity. The guide is mimeographed and spiral bound with a soft cover. OBJECTIVES AND ACTIVITIES: Three general objectives are described at the beginning of the guide. Others form an integral part of the main text. Specific activities are listed for art, language arts, math, physical education, and social studies. Sample lessons include language arts, write a story, draw a picture, playing with paper, and response to mood. INSTRUCTIONAL MATERIALS: There is a brief bibliography. STUDENT ASSESSMENT: Two possible methods of evaluating creativity are included in the text. (MBM)

ED051148

CHEYENNE PUBLIC SCHOOLS

CHEYENNE, WYOMING

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

YESTERDAY'S MINDS OR TOMORROW'S?

A HANDBOOK ON CREATIVITY

Yesterday's minds can be filled with facts;
Tomorrow's must be creative.

L. D. CRANE
Superintendent of Schools

LEO P. BREEDEN
Assistant Superintendent for Instruction

Prepared by:

LOUISE FLYNN

SP007170

CREATIVITY COMMITTEE MEMBERS

Ruth Heath	Evelyn Thompson	Neva Sawyer
Dwight Osborn	Marcelyn Wahl	Merrilyn Borthwick
Helen Faussett	Elmer Dykeman	Velma Tisdale
Carolyn Vestal	Nina Svoboda	Mary Jo Morandin
Lester Burkey	Harlan Stanley	Blanche Weaver
Barbara Latta	Catherine Van Reekum	Margot Von Forell
Kathy Taylor	Barbara Martin	Jim Zachman
Eileen Farr	Nancy Allison	Meredith Weston
Bette Groh	Thomas Martin	Erma Whitmore
Martha Tilton	Betty Lou Pagel	William Tanner
W. Courtland Skinner	Charlene Stogsdill	Naomi Allen
Irene Moon	Frances Boan	Kathleen Mead
Edna Brown	Virginia Clark	Eileen McNamara
Faye Russell	Earl Hackney	Leo Breeden
Louise Flynn	Jean Hayek	Dr. Wilma Hirst
Helen Franklin	Ruth Springer	Bruce Nelson
Juanita Keuck	Ingrid Vaiciulenast	Shirley Larson
Geraldine Winkler	Dorothy Andrews	Frances Smith
Blanche Linville	Lillian Zimmerman	Alice Ford
Glee Aisenbrey	Agnes Adolphson	Lillian Gulke
Ann Coffin	Mary Ellen Massie	Jane Houston

TABLE OF CONTENTS

		Page
I.	Introduction	2
II.	Objectives	3
III.	Definition of Creativity	4
IV.	The Creative Teacher	5
V.	What is the Creative Child Like?	6
VI.	How Can We Identify the Creative Child?	8
VII.	Method of Measuring Creativity	11
VIII.	An Evaluation	12
IX.	Use of Creativity to Release Inhibitions	13
X.	Use of Creativity to Release Talents	14
XI.	Evoking Thinking in a Creative Way	16
XII.	Problems of Developing Creativity	17
XIII.	What Becomes of the Creative Child?	20
XIV.	Addenda	
	Art	21
	Language Arts	23
	Math	25
	Music	27
	Physical Education	29
	Social Studies	30
	Sample Lessons	
	Language Arts	32
	Write a Story	32
	Draw a Picture	32
	Playing with Paper	33
	Response to Mood	35
XV.	Subject Matter and Creativity	39
XVI.	Some of the Most Important Facilitating Procedures for the Development of Creativity	40
XVII.	Don't Get Perconel with a Chicken	41
XVIII.	Bibliography	42

INTRODUCTION

This guide to CREATIVITY IN THE CLASSROOM is in no sense meant to be a finished product, but rather a plan of action for teachers at all grade levels. It will, therefore, contain the findings of the Creativity Committee of the Cheyenne School System for the past few years as well as some suggestions (or gimmicks, if you please) to assist the teacher in enlivening the curriculum and creating an atmosphere conducive to developing pupils in originality.

The materials included in this study have been gleaned from study of books, pamphlets, speeches, and committee reports. It is, therefore, practically impossible to give individual recognition to all resources. For your assistance in the development of this guide, we are grateful.

OBJECTIVES

The objectives of this handbook shall be three-fold:

1. To enable the teacher to identify the creative child
   - A. By tests
   - B. By less formal means
2. To detail ways and means of securing creativity in the classroom at the various grade levels.
3. To assist the teacher in preparing a creative lesson and in determining what has been accomplished.

DEFINITION OF CREATIVITY

Creativity involves an ORIGINAL RESPONSE to stimuli that is also INGENIOUS and ADAPTIVE to a real situation.

Not all modification or distortion of idea is creative. The purpose and usefulness of the new product must be evaluated also.

DIVERGENT thinking is CREATIVE thinking tending toward:

1. Revising the known
2. Explaining the undetermined
3. Constructing what might be

It tends, therefore, to be NOVEL and SPECULATIVE.

CONVERGENT thinking is the opposite. It tends toward:

1. Retaining the known
2. Learning the predetermined
3. Conserving what is.

It is likely, therefore, to be CERTAIN, USUAL, and ACCEPTABLE.

Both types of thinking are needed and neither must be discarded nor underestimated in searching out the other.

THE CREATIVE TEACHER

To become a creative teacher:

1. Find the area in which you are likely to originate new ideas.
2. Don't be afraid of moods.
3. Deviate from accepted patterns. Do not do what others have done, but what they have not done.
4. Let your imagination go.
5. Don't be satisfied with one idea.
6. Try for synthesis instead of analysis. The emphasis in creative thinking should be in combining separate elements.

(Remember no teacher can be creative all the time. Pick the lesson you wish to teach this way and then develop your plan for it.)

Example:

Analysis:

Take a simple object apart, piece by piece, such as a table lamp.

Synthesis:

Give the students the lines and ask them to develop a lamp, making it interesting, new, unusual, etc.

Application to Language Arts: Take a theme subject. Put on the blackboard all the ideas the children can think of for this subject. Then organize the ideas for writing. Omit any ideas which do not come within the area prescribed by the subject chosen.

Creative teaching comes with:

1. Respecting the personality of the child
2. Seeing each child as he is
3. Respecting and enjoying him
4. Helping him grow in his own best way.

To do this:

1. Provide an atmosphere for growth
2. Be warm, friendly, understanding, and working
3. Help him to belong
4. Help make the urge to learn a vital part of school
5. Do not demand perfection
6. Help the child discover his own world
7. Let him alone
8. Recognize and aid him in finding tools to work with

Say: "Tell me about this!" not "What is it?"

WHAT IS THE CREATIVE CHILD LIKE?

From Highlights for Teachers

Every activity in the classroom offers opportunities to foster creative thinking. So the problem for the teacher (especially in the elementary grades) is two-fold:

1. To identify the creativity in the learner
2. To find ways to further this creativity in as many classroom situations as possible

When the teacher is creative, the classroom is interesting. This does not mean there is no limitation upon the pupils. A climate for creativity is developed within the limits or guidelines which the teacher has established with her pupils.

Let us not forget that all children need to learn:

1. The basic facts of their subject matter
2. The limitations of acceptable behavior

It has been shown, however, that the discovery or creative method of learning facts (that is, the think and produce method) is as effective as the formal method (the receive and reproduce method.)

With this in mind, the teacher will note that creative-thinking persons are those with:

1. Great curiosity
2. Zeal for exploring
3. Independence in thought and action
4. Willingness to take a chance
5. Imagination that is rich and active
6. A command of a large body of facts and experiences on which to call when needed. (remind children that their minds are like the shelves in a grocery store. The grocer cannot sell what he does not have on his shelf.)
7. Mastery of a wide array of reasoning skills

The creative child may often ask questions, express an opinion, say or write something which strikes the teacher as unusual or different from what most children do or say.

He may initiate a fresh idea, a deeper meaning, symbolic materials and relationships, a combination of ideas that are not ordinarily combined.

He may be a non-conformist, annoy his classmates, and the teacher at times.

He may have "wild" ideas, be over-zealous and self-centered.

He needs acceptance and guidance.

Often the creative child needs sufficient emotional security and

feelings of adequacy so he will not be chiefly concerned about himself. (He may not be able to participate in group activities and should be excused from them wherever possible and allowed to work on his own pattern.) He needs experiences in emotional comfortableness, joy in creativity, and exhilarating feelings of accomplishment.

There is no single method for nurturing creativity; procedures and programs must be tailor-made, if not for individual students, at least for different types of students. Once self-discipline and self-control have been established, the creative person can be allowed flexibility within the limits. This can be true especially at the secondary level because the creative child here may be seeking for ego identity and need to be given more non-directive guidance than authoritative pattern.

HOW CAN WE IDENTIFY THE CREATIVE CHILD?

I. By tests:

IQ tests fail to identify 70% of the highly creative. Evidently the child with the high IQ has learned by the convergent method, whereas the creative child looks at the knowledge not to remember it but to use it for himself. The creative child does not have a low IQ (although a child with a low IQ may be found to be creative) but not necessarily a high one either. An IQ of 105-120 will likely be the record of the creative child. The IQ is not, however, the means of identifying this child.

E. Paul Torrance, University of Minnesota, has done as much with measurement of "creativity quotient" as any one, although he abhors the term CQ. He says, "From our experience there is no test which will infallibly test CQ. Creativity is too complex." Some early tests he used were:

To draw a man
Make a drawing out of a curved line
Draw as many objects as you can from two parallel lines
Tell an imaginative story about a monkey who could fly
Tell of the unusual uses for a brick
Tell what would happen if clouds had strings attached to them

These led to the development of tests using Circles (35 on a page for the student to use in creating pictures), Lines, Squares, Incomplete Figures, etc. In trying to validate these tests, Dr. Torrance has allowed 400 people (Dr. Wilma Hirst of School District #1 is one of these) to administer these tests and score them. The Research Edition of Torrance Tests of Creative Thinking has been put on the market by Personnel Press, Inc., Princeton, New Jersey, as of June 1966.

The Circles test confronts the person with completed structures. The Incomplete Figures test gives the person unfinished structures. The two tests, therefore, require opposite kinds of responses. The Circles test involves the student in tendencies to disrupt structure and dissipate energy and attention. The Incomplete Figures test requires the student to show tendencies toward structure, integration, and synthesis. These two tests, then, elicit greater variability in such traits as fluency, flexibility, originality, and elaboration.

II. Without tests

The creative person has been best described by Calvin W. Taylor of the University of Utah. This child is:

1. Self-sufficient
2. Independent in judgment making
3. Courageous and adventurous
4. Likes to solve problems and think through ideas
5. Dominant
6. Willing to stand alone
7. Prefers complexity
8. Prefers variety

In seeking the creative child in the classroom, watch the others around him. If some individuals appear excited, disturbed, or threatened, perhaps there is a creative person around whose ideas are vaguely sensed as threatening to the other children. The creative child is often shunned, humiliated, contradicted, or banished by the group. He irritates others with his ideas and may be slapped down orally by the rigid teacher for his seeming "wild or way out" concepts. If this happens often enough, he withdraws and is lost. Although he may not be openly antagonistic in a classroom, he may be stubborn and uncooperative.

Since the IQ test does not identify him, certain characteristics he has which are different from the person with the highest IQ may be important for us to know:

He may be

1. More willing to take risks
2. More likely to sense and question the implicit
3. More puzzled
4. More "bohemian" in behavior
5. More likely to express the irrational
6. More sensitive
7. More exuberant
8. More likely to accept himself for what he is

ALL PERSONS HAVE SOME CREATIVE POTENTIAL. This does not mean that there will not be wide individual differences. Creative power develops with discovery and exploration but before there can be power, preparation must be made for the process of creativity. CREATIVITY IN A CHILD DOES NOT JUST HAPPEN. It is the result of experiences to which children are exposed, opportunities children have for expression, and the encouragement they receive from participation.

One creative writer says that many early influences lead young children toward imitation rather than creativity. The great problem, then, is to teach them to reach beyond imitation to their own production.

The four steps in the creative process are:

1. Preparation
2. Incubation
3. Inspiration
4. Verification

The creative teacher should deliberately try many different approaches, but must remember that creation does not take place in a single class period. Give time to think and plan, then set aside a period for incubation before returning to the assignment for a report of accomplishment.

GIVE YOUR PUPILS TAKE-HOME THINKING PROBLEMS

Encourage your pupils to play with ideas. (Suggest that there are many inventions which have not been made. What would you like to have improved: an ice cream cone which wouldn't drip on your shirt front?)

Remind the manipulative child that he may have to make the models, or

the artistic child that he may need to draw a plan.

Help them create games. (Suggest a spelling match where the poorest speller does not get to sit down first)

Vary the rules and regulations. (Suggest hide-and-go-seek where no one moves. The child who is "it" must keep his eyes on the spot where he is "hiding" and the others have three guesses to determine where he is.)

Watch the change such ideas as these make in their thinking processes.

A creative mind continually reaches toward new designs, new patterns, new insights; there is an almost endless freshness in its inexhaustible powers. Danny Kaye was asked how long he thought he could keep up a weekly TV show that was new. His reply was that each TV show gave him new ideas, so many that he would probably never be able to use them all. He is a creative comedian.

BEFORE CHILDREN LEARN TO READ, THEY OFTEN HAVE A FRESH APPROACH TO MATERIALS. Creative growth seems to move in cycles from ages 1-4, then a slump; 6-8, then a slump; 10-12, etc. These changes seem to occur in correlation with new stages of development and also physiological changes. The 4th grade slump is most often mentioned as the initial one. Could a part of the reason for this be the first introduction to books? Might it be that the teacher places the emphasis in reading on value of the content rather than on the ideas the reader secures from reading?

People generally accept the printed word as authority. "I saw it in the paper" is so often used by adults as the verification of information.

THE CREATIVE TEACHER SHOULD DELIBERATELY TRY AS MANY DIFFERENT APPROACHES AS POSSIBLE.

The second slump mentioned as important comes during the junior high school years. This one often turns a creative person into a conformist and he loses his potential. The reason for this slump is probably psychological. The junior high student is trying to establish his own ego. He rebels against parental authority and oftentimes school authority, not because he is bad, but because he is trying to find himself. Peer approval becomes more important to him so he will want to become a "good fellow" rather than express opinions which will lead to ridicule and rejection. The junior high school teacher needs to be much more careful to be non-directive in attempting to secure creativity.

METHOD OF MEASURING CREATIVITY

The problem has been presented. The student is sitting in a Rodin pose with a strange look on his face, apparently doing nothing.

Do you, as a teacher, say, "Johnny, what are you doing?"

If he says, "Thinking," are you tempted to say, "Stop thinking and listen to me."

The creative teacher must remember that the emphasis in this type of teaching is on what happens to the child, not on what he produces.

Therefore, creative expression must come before mechanics. (See "Don't Get Perconel with a Chicken", p. 41) Praise, red-pencil the good parts, but don't grade--at least not yet.

1. Proofreading aids in learning techniques.

2. Try having an individual or class conference on errors.

3. Put the stories on the opaque projector so the children can see their errors more easily. (Be careful with this because a shy child may be afraid to try the next time.)

If creative work must be graded, establish the guide lines before the child begins the project. Look for honesty of effort, originality, depth of thought before precision of form and pattern. Comment on good parts. If necessary, give two grades. Even then, tentative grades should tend to be generous rather than exacting. DEVELOPING PRIDE IN COPY DOMESTICATES CREATIVE ACTIVITY.

If the individual conference brings to light that the child is honest in his effort but his achievement is so unlike anything that the teacher has ever seen before that there is no basis of judgment, be most careful. Imagine what Salvador Dali's teacher might have thought of his pictures!

AN EVALUATION

From FREEING THE CHILDREN TO WRITE Mauree Applegate

Do not evaluate a child's story apart from the child.

In the early grades a child's story might be evaluated thus:

1. Was this a good piece of writing for this child?
2. Is the writer developing a style of his own?
3. Is there a behavior clue in this writing that will help me understand this child better? (Do not judge child by one clue)
4. Does this work show improvement over the last?
5. Has this person experimented with any new words or ideas?
6. How well is this story built?
   - Plot
   - Effective beginning
   - Artistic ending
   - Character development
   - Conversation and/or description, if apropos
7. How well is this child choosing and using vocabulary?
8. Has he made use of the mechanics he should know?

sentences	paragraphs	spelling
punctuation	margins	titles, etc.

9. With what one or two points should I help him in conference?

USE OF CREATIVITY TO RELEASE INHIBITIONS

Children often think creatively when we oldsters let them do it. The current trend, however, has been education toward conformity rather than the development of individual thinking. Although we have known that man learns naturally by creativity, we have thought it more economical to teach by authority. So pupils who have been quite creative when they came to school, unless they are so strongly creative that they refuse to conform, tend to lose the characteristics which make them individual thinkers in our school system.

In June 18, 1966, "Saturday Review of Literature," John Ciardi wrote:

> "It is the good luck of our school system to take into itself annually one of the best imaginable audiences for poetry. It can only be the system's bad practice that sends out of itself annually a graduating class of semi-literate dolts stripped of the emotional excitement with which they began reading, and unstored by the insights that might lure them on to recognition."

Teachers who wish to concentrate on encouraging creative activities begin by asking some questions:

1. What kind of children are these becoming?
2. What kind of thinking are they doing?
3. How resourceful are they?
4. Are they becoming more responsible?
5. Are they learning to give thoughtful explanations of the things they do and see?
6. Do they believe their own ideas to be of value?
7. Can they share their ideas and opinions with others?
8. Do they do some thinking for themselves?

One procedure which has been successful at the junior high school level is a lesson called playing with paper. (Entire lesson is outlined in Addenda, p.33). The whole purpose of this lesson is to help the pupil understand that each one has his own way of expressing his learning and that individual ideas do not have to conform to a pattern to be acceptable. From this point the teacher can help the junior high school students express differences of thought and idea without fear of criticism.

Pupils should be encouraged:

To see relationships
To combine thoughts and elements
To explore possibilities
To analyze ideas

USE OF CREATIVITY TO RELEASE TALENT

A high degree of sensitivity, a capacity to be disturbed, and divergent thinking are essentials of the creative personality.

Many persons have long recognized that there are different kinds of creativity; that creativity does not mean just being highly competent in seeing relationships.

During the elementary period, children have received their greatest attention to their creativity in writing and art. However, a creative science teacher suggested that one of the finest collections of rocks she had seen was made by a kindergarten group who classified their rocks as large-small, white-brown, etc. It was her idea that using simple classifications such as these the children could learn about science by a simple collection such as rocks or leaves. Use the basic principles of subject matter but keep the process simple enough for the level of the children who are working on it.

In the junior and senior high school level, the creative person may be able to advance far beyond the classroom activities. Once the motive has been set the teacher should aid the student in using the ten rational powers to think of new answers to the problem:

1. Recalling and imagining
2. Classifying and generalizing
3. Comparing and evaluating
4. Analyzing and synthesizing
5. Deducting and inferring

The task of teaching is partially solved if the students bring curiosity with them.

Exploring, manipulating and questioning can be used in the solution of a problem. In literature or social sciences these may lead to research, extensive reading, or the creation of a project that is entirely new.

One author proposed that the student be lead to a book of non-fiction and encouraged to read widely on each topic developed in the book. A truly creative report to the class would include the findings from all of the readings.

Another possibility using a paper-back edition would be to annotate the margin with the questions which the author raised in the mind of the reader, then prepare the report from the new ideas rather than the original source.

Many pupils are most creative at home. Science teachers are quite familiar with the student who sends his pet cat or mouse into orbit with a back-yard missile. English teachers will have poets or short story writers spending their time filling notebooks with words. Even the home economics teacher will have students who are combining foods in new ways (sometimes much to the consternation of the father who is expected to eat the "casserole".)

Use "how" and "why" questions to release the creative child and then provide time for him to explore the idea and to incubate his knowledge before

he presents his findings. One way to provide extra time in a rigid curriculum is to present the problem casually one week and then say, "Next week we will talk about this again." After a few minutes another time, then make the assignment or work out the experiment.

The skills of inquiring, creative problem solving, research, and report making will need to be taught. Time, too, will have to be found to answer questions and assist in probing further as the child finds other facets more interesting than the original question. Remember some of the greatest inventions were those which came from one of these facets which became more important than the original. Aid the pupil in evaluating what he is doing, in finding his way, and show respect for the unusual solution.

Self-initiated work and creative imagination should not be discouraged, rather encouraged and guided.

Creativity thrives on reading. Allow pupils to compare the same social studies area in all the textbooks available in the classroom and discuss the materials from many points of view, rather than accept one as the authority.

The Civil War period of American History lends itself to this type of treatment since every library contains a wealth of both fiction and non-fiction about Abraham Lincoln.

Music and art provide fertile fields for the student to reach beyond the class for new approaches to subject matter. Urge the individual to think without counsel from others and to be courageous enough to present his idea even though it may be "far out" to the rest of the group. Establish a climate in the classroom to accept this type of report. Help the student to be critical of his own thinking to see that it is original, ingenious, and will work before it is presented to the public. Aid him to analyze carefully before reaching a new solution. Show him how to experiment with many ideas, and encourage him not to accept the first solution when the 100th may be better.

The student who becomes directly involved in a piece of research is much more likely to continue this pattern into his adult life. Involve this type of pupil in the solving of a problem. Channel his findings into language that is acceptable and apt. If it is necessary to involve another teacher to do this, the finest team teaching may evolve.

EVOKING THINKING IN A CREATIVE WAY

Osborn suggested the following questions for stimulating new ideas:

We wish to stimulate children to think of new ideas for improving a toy.

What would happen if we made it larger?

What would happen if we made it smaller?

What could we add?

What would happen if we took something away?

What whould happen if we took something away and put something else in its place?

What would happen if we took it apart?

How could we rearrange it?

What would happen if we multiplied it?

What would happen if we changed position of its parts?

What would happen if we made it of different material?

What would happen if we gave it motion?

What would happen if we gave it odor?

What would happen if we gave it light?

What would happen if we gave it sound?

What would happen if we changed its color?

What would happen if we changed its shape?

What would happen if we made it stronger?

What other uses could we put it to?

PROBLEMS OF DEVELOPING CREATIVITY

When the creative child is forced into a program which is too rigid, he does not find his school life acceptable:

He rebels
He becomes an underachiever
He becomes a troublemaker
He withdraws into himself entirely
He develops personality problems

What can the teacher do?

ALL TEACHERS ARE CREATIVE. Some do not know this, but they are constantly improvising approaches to their subject matter. They make use of such varied experiences as:

Dictation
Completion
Picture
Music
Rhythm
Imaginary approaches

The more interesting the teacher's background, the more ways she can find to explain the materials she is using.

If the teacher feels secure:

1. In her position
2. In her subject matter
3. In relation to her administrator
4. In the knowledge that she will be able to handle any classroom situation which may arise from releasing guidelines

the teacher will not be afraid to undertake creative activities.

When teachers begin to concentrate on encouraging creativity in children, they nearly always report two significant results:

They become aware of abilities in pupils of which they were formerly unaware
They find their pupils value themselves more highly.

The teacher should select an area in which she feels secure to use for creative activity. The first effort must be to make the familiar strange or the strange familiar. For example, she might ask the question:

IS THIS AN INTERESTING CLASSROOM?

What do we have in here that needs to be

Helped
Solved
Looked at

Felt
Tasted
Smelled
Dreamed about
Loved
Respected

How can we make this a more interesting classroom?

Remember, the child who does not have the best idea may be the most manipulative in drawing a picture of the classroom that is interesting, or in working with art or with hammer and nails or paint to make it more so.

There is no single method for nurturing creativity: procedures and programs must be tailor-made, if not for individual students, at least for different types of students.

Identifying the various kinds of leaves from the trees in your area may be used at all different levels: making a border and classifying them by size in primary grades, learning to identify the trees and to preserve the leaves in elementary grades, to study of tree rings, uses of wood, preservatives, etc., in high school. This, too, is a science subject which may also be used in language arts in the study of how paper is made.

"If you were a molecule, how would you act?" not only lends itself to research in science, but to original drawing or writing about behavior.

While such a project is going on, the classroom may more nearly resemble a beehive than a classroom, but so long as the pupils are learning the teacher should not fret.

83% OF ALL KNOWLEDGE COMES FROM SIGHT. Observation is a most important asset for teacher and student. Young children whose parents have given them ample opportunity of seeing places, objects, animals, machines, etc., have a stock of experiences with which to begin oral and written activities.

Give young students a chance to tell where they have been and what they saw.

Construct some classroom exercises in listening. Your students are going to a music assembly. Do you teach them to listen to music? Explain how to listen for music themes. If they are uninterested, have them listen for the various instruments. Listening creatively causes better behavior in the assembly.

What would you do as a teacher if some pupil grew beyond your own knowledge on a subject? Might a third grade boy draw and explain the workings of a telephone or a motor without your knowing whether or not he was factually correct?

Once your explanation of an assignment has been understood, respect the student's presentation. Appreciate and accept the product he develops. It may not be correct, but he will learn that. If other students question him, suggest research by the group. If they do not, they will probably not remember what he has said anyway.

Use all possible equipment, but do not expect the equipment to do your job. There is an audiovisual aid to every lesson if the teacher plans for it. Prepare your students for the film you are showing and discuss it with them when you have completed it. Never use a classroom film just to entertain students.

DON'T BE AFRAID TO MAKE A MISTAKE. YOUR PUPILS WON'T EXPECT YOU TO BE PERFECT EITHER. As a matter of fact sometimes a student hesitates to give his ideas because the teacher is too nearly perfect.

Some teachers work from a structured classroom atmosphere and some from a permissive. If the class is structured, a teacher may have trouble releasing the class for a permissive situation. SELECT ONE AREA FOR CREATIVITY UNTIL THE PUPILS HAVE ESTABLISHED A PATTERN, THEN MOVE THE PATTERN FROM ONE ACTIVITY TO ANOTHER.

WHAT BECOMES OF THE CREATIVE CHILD?

Encouraging true creative expression will establish a firm basis for creative study and creative living. Unfortunately, not all creative people are identified. What then?

Some will rebel.
Some will conform.
Some will make personality changes.
Some will even become mental health cases.

Children who score high in creative behavior prefer:

To learn by creative ways rather than by authority
To be spontaneous rather than deliberate
To discover for themselves rather than accept authority

Undoubtedly, this child thinks differently from other people. His interests are broader. He will select more wide-ranging goals for himself. He must be given an opportunity to

Become receptive to new ideas
Learn to experiment
Make his own attempts at discovery.

Each age in life allows opportunity for these methods of learning. The kindergarten child enjoys coloring because he likes to experiment and discover things for himself.

Suppose you say to him: "There is a spider on the wall--" (imaginary, of course) "draw him, describe him, play that he is Miss Muffet's spider and tell what he thinks of girls." The small child would like such an activity and the variety of response would be as great as the number of pupils. For older students tie in E. B. White's delightful story, "Charlotte's Web" about the spider that could spell. Branch off into other insect or animal stories, including writing one's own fables. Include the story of Bruce and the spider. Although these ideas tend to be language arts, there are many other possibilities such as a scientific collection of spiders, research into spider life and habits, or the mathematical one of web construction. Suppose the spider has a hitch in his spinneret and figure out a shape for his web with one peculiarity showing up at regular intervals.

Much creativity is lost in school because the parents, peers and public seek conformity rather than individuality. We have only to examine TV advertising to realize how much of an attempt is being made to force adults to conform.

A D D E N D A

Art
Language Arts
Math
Physical Education
Social Studies

Sample Lessons
- Language Arts
  - Write a Story
  - Draw a Picture
  - Playing With Paper
  - Response to Mood

ART

1. Illustrate a sentence such as "Birds fly."
2. Outline a picture on a peg board with colored pegs.
3. Design a picture with numbers for another child to draw.
4. Keep envelopes containing basic room and furniture for child to arrange during free time.
5. The same may be done with parts of automobiles or airplanes.
6. Use flannel board pieces to design posters or displays.
7. Color or paint a plate with your favorite dinner on it.
8. Use stick figures to illustrate prepositional phrases. (on the table, under the trees, beside her)
9. Freehand cut outs--such as silhouettes. Arrange a picture of these.
10. Tear out pieces of paper and paste them on to make a design.
11. Tell a story with a series (6) pictures.
12. Insert the strip of pictures through slits in a shoebox and move them to get your own TV show.
13. Listen to music and draw a mood picture.
14. Illustrate words: quiet words, noisy words, funny words.
15. Draw a plan for a house which would give you something you don't have in your own house but would like--(your own room, a telescope,etc).
16. Dress dolls to show old-times and/or now.
17. Make a puppet show or marionette show.
18. Make a salt map of the country you are studying.
19. Draw an outline map of the U.S. and prepare pieces for each state so that others can arrange them like a jigsaw puzzle.
20. Design borders, decorations for tray favors or mats.
21. Cut a shape from newspaper. Outline it on construction paper. Now cut the original shape in two and use one part of it to help make a form of the outline on the construction paper. Continue cutting and using pieces until some concept is seen.
22. Arrange centers of art activity: painting, coloring, cutting. Allow students to choose center before time so you avoid decision making during the lesson. In whatever center you are working, show some lesson you have had the week before.

23. After students have used cutting as a means of making a picture, have them take the scraps and work out a design.

24. Use music such as the Peer Gynt Suite. The music department will supply you with a listing of all records available for this lesson. Record #1, "In the Hall of the Mountain King", may tell a story. Review the story with the children and then have them listen to the music and then write the story. Record #2, "Morning", may be listened to and then let the children select colored chalk and draw a picture. Record #3 is "Anitra's Dance". Here the chalk picture will show much movement. #4 is "Asa's Death" and the children will probably choose dark moody chalk colors.

25. Use wet paper. Allow the child to drop paint drops on the paper and shake it until they get a design. Then give the picture a title.

26. Use wrapping paper for a mural to tell a story. Let children leave round circles for faces and take the parts when telling the story.

LANGUAGE ARTS

1. Get word lists of favorite words: quiet, noisy, old-fashioned, made-up, color, funny, etc.
2. Play charades with names of popular songs.
3. Teach shades of meaning by using colored paper: mount pictures on light and darker paper according to size.
4. Play music and have students write what they hear.
5. Use magazine pictures for story ideas.
6. Develop sensory impressions by picture (cool salad, hot tea).
7. Make up comic strips. Child who can draw do the pictures; others write the story.
8. Make up story problems.
9. Make a new book jacket for your favorite book.
10. Display a picture of a face. Ask child to write or tell how the person feels and why he feels this way.
11. Take two sides for a discussion of Goldilock's behavior--going into someone's house when no one is home, etc.
12. Use the family tree idea to show relationship of characters in a story or novel.
13. Tell a story in a collage by pasting parts of the picture onto a background (Odysseus at the River Styx).
14. Imagine you are a character in a story or poem and write a letter home telling what is happening.
15. Make a list of all the things Mother Hubbard could have done when she found the cupboard was bare.
16. Make a parody of a popular song.
17. Have Book of the Month Club for favorite reading.
18. Use a poem such as "Nancy Hanks" by Stephen Vincent Benét and write the answers to the questions in the same rhythm pattern.
19. Make lists of observations by sight, sound, taste, smell, etc.
20. Play a "let's pretend" game of walking down the aisle in a store and name all the items on the counters.
21. Make a bulletin board of figures of speech in advertising (Tiger in the Tank).

22. Put yourself in the place of an object and explain how you work.

23. Complete similes with interesting comparisons.
"A tree in winter is like-------."

24. Use Japanese Haiku to start class on poetry. This is a 3-line poem of two related concepts, first line contains 5 syllables, second 7, third 5.

25. Prepare a playlet of a story,or a radio or TV program.

26. Act out a story without words.

27. Have a "This Reminds Me" box with words or phrases in it such as "blinding blizzard", "nightmare". Let children draw out a phrase and make up an impromptu story about it.

28. Clip an incident from a newspaper and make up a story.

29. Have a Champion Liar's Club to tell the tallest tale.

30. Keep lists of picturesque speech.

31. Play charades with new words, or vocabulary from spelling list.

32. Play WORDO like Bingo with words from Basic Vocabulary List.

MATH

1. Play with an abacus to perform the operations with numbers.
2. Help your teacher prepare a file box of number games.
3. Make up story problems.
4. Make up number puzzles.
5. Design a picture with numbers for another child to draw.
6. Play "Candid Camera" with numbers, one person to say, "Smile, you're on Candid Camera" when he gives a number problem to someone else.
7. Act out rhythm patterns, counting as you go.
8. Set up a house pattern according to a scale.
9. Collect all kinds of measures for an exhibit.
10. Play store, bank, or shopping.
11. Set an amount for an ad and write the right number of words so you don't overspend your money. (10¢ a word)
12. March in patterns of two's, four's, six's, etc.
13. Use house patterns, dress patterns, or recipes to teach fractions.
14. Make a scale model of your favorite toy.
15. Count to 100 with only 12 2's. Prepare similar games.
16. Plan a new calendar which will more effectively divide time.
17. Teach coordinate plane by seating:

    Each child has a place in space (seat number, row).
    All whose row number = seat number, stand up.
    r = s makes a / line same as x = y on a coordinate plane.
    Each child whose seat number is greater than row number, stand.
    s > r does not produce a line but a half plane.

18. Roll hoops or circles down the hall to see circumference.
19. Prepare a banner bulletin board (mural) of a number concept such as the Filmacci series (1-2-3-5-8-13) and then research it in nature, art, physiology, etc.
20. Use familiar games and play them with numbers (London Bridge--"Would you rather be an even number or an odd?")

21. Construct objects having proportionate dimensions.

22. Draw figures on cross-sectional paper and then count the squares to aid in understanding area.

23. Examine or build three dimensional figures to learn space relationships.

MUSIC

1. Sing your name or a sentence and figure out note values.

2. Make up a melody for it.

3. Beat accents of a poem with fingers on desk as poem is read aloud.

4. Hop, skip, jump rhythms. From this move to folk dances such as polka or schottische.

5. Be a machine and act your job (an automobile wheels and steering gear. Get a team together to do this).

6. Walk like a horse, train, elephant, etc. Make a guessing game of it. Make a tune to fit it.

7. Act out musical time scores.

8. Draw an imaginary staff on the floor and pretend you are a note. At the correct signal sing your note.

9. Find bamboo poles and practice Oriental stick dances.

10. Listen to records and make up a story for the music.

11. Write your own words for popular songs.

12. Make an instrument for the rhythm band from a comb, a pan, a cigar box, etc.

13. Make up your own rounds (like "Three Blind Mice").

14. Make up a melody for your favorite poem and sing it.

15. Act out a story to suit various kinds of rhythms.

16. Do what the music tells you--act out a recording.

17. Invent singing games.

18. Pick out instruments to play with a recording.

19. Use only black notes and make up a tune or 5 tone scale and only white notes on a piano.

20. Finger paint to music (let child choose colors).

21. Use chalk on wrapping paper the same way.

22. Use puppets and have them make up their own songs.

23. Dramatize musical stories.

24. Make up a question and answer song:
    "What did you see on your way to school?"
    "I saw ----- on the way to school."

25. Tell us how to interpret this song: loud, soft, faster, etc.

26. Compose a new ending for an old song.

27. Add beginnings, interludes, and endings to familiar songs.

28. Create a new chant. "Down at the Station".

29. Make up additional verses to a song such as "Billy Boy".

30. Make up the vocal harmony for your favorite song.

PHYSICAL EDUCATION

1. Hop, skip, jump, do folk dances such as polka, schottische.

2. Pretend the room is a lake and be a boat on it. (Have all kinds of boats)

3. March in patterns.

4. Use rhythmic movements to music, or to poetry that is read aloud.

5. Manipulate toys and then let children pretend they are a part of the toy and act out how it works.

6. Use rhythmic movements to tell a story.

7. Make up action games such as a version of Musical Chairs where people can sit only when certain numbers are said or use a story like "Little Red Hen" and let them sit only when she says, "Then I will."

8. Use yoga to tense one muscle at a time, then relax, then repeat. Make a game of it.

9. Vary the rules for a game such as working out a game of tennis which would require a five man team or a game of baseball for two or three on a side.

10. Do square dances.

11. Dance the Limbo or the Lambeth Walk (line dance where people step 1-2-3 hop) Use other line dances.

12. Pantomime all kinds of actions of others.

13. Create games which require action.

SOCIAL STUDIES

1. Make murals, scrapbooks, salt maps, etc. of country being studied.
2. Keep an imaginary diary of a trip to a famous place.
3. Prepare a guess-who bulletin board with a brief description of a famous person for class to guess.
4. Hold elections, council meetings, legislative sessions, trials, etc.
5. Make replicas of famous buildings.
6. Pretend you are a famous character and explain your ideas.
7. Keep a bulletin board of historical references in cartoons or advertising.
8. Name 5 new automobiles for historical characters and write an advertising slogan: George Washington--I cannot tell a lie. This car will stand up in any weather.
9. Prepare a radio or T.V. show of a dramatic moment in history.
10. Make a mural of the country being studied showing how the people live, what they eat, etc.
11. Write letters from characters--such as a sailor on the Santa Maria writes home and puts the letter in a bottle.
12. Make an outline map of the U. S. and states for class to put together like a jigsaw puzzle.
13. Use recordings of famous documents by fine actors.
14. Set a famous document to music (Flag Salute).
15. Use posters to publicize famous events (Lincoln-Douglas debates).
16. Prepare a collage of publicity of an historical event.
17. Write imaginary stories about historical events.
18. Play "You are There" describing an event but not naming it.
19. Prepare skits or pantomimes of events.
20. Play songs suitable to the historical period studied.
21. Take $1,000 imaginary money and invest in stock market. Keep a record of your earnings for a week.
22. Interview people who lived through World War I or II or the depression, or a natural disaster such as tornado or flood.
23. Brainstorm how to improve this school or community.

24. Take a community survey on safety, recreation, etc.

25. Play Vocabulary games such as "I'm thinking of a country which has coal as its greatest export, etc." This game can be used with places, people, authors or numbers or even Latin words or phrases.

26. Role playing--act out behavior of a character--Ghengis Khan, Marco Polo.

LANGUAGE ARTS

PURPOSE: To create and present a program for Thanksgiving Day

PREPARATION: Tell pupils that we are going to do something different for this program, but do not tell what until you are ready to begin working.

PRESENTATION: Allow the class to work in groups of 2-3-4-5 (Ordinarily we say creativity should be original work of one person but for this a group of no more than 5 can develop something they will enjoy).

Using some information they already have, they are to prepare and present during the class period an impromptu program. They may give the story of the first Thanksgiving in dialect, beatnik or any style they wish, do a song, a TV show, letter, poem, play, or pantomime.

You may have to start them. Suggest possibilities.

Example: (Tune, "Chicago")

Thanksgiving, Thanksgiving, that old turkey day
Thanksgiving, Thanksgiving, too much do I weigh.
Every time I think of Thanksgiving, Thanksgiving,
I wonder how it would be to live in
The old days, the old days
When you first had to fast, etc.

Let pupils leave one idea for another, but help them watch their time.

Begin presentation that day to keep motivation alive.

Write a Story

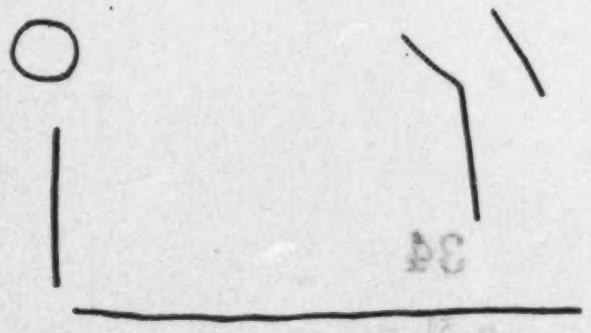
Give the students four related words such as:

Pitcher
Plate
Batter
Rhubarb

Ask them to write a story. The obvious connection will be to baseball, but the creative child will find others.

Draw a Picture

Give the students this set of lines and circle and ask them to make a picture of it.



PLAYING WITH PAPER

This is a single lesson which often leads to an extensive project.

PURPOSE: to aid pupils in finding interests
to release sensory reactions
to break down inhibitions
to extend interests

PROCEDURE: Pupils will need two sheets of notebook paper. As they play with one sheet, they put observations on the other one.

Paper is examined as follows:

1. Hold it to your face--note it is smooth and cool.

2. Put your hand behind it--look toward the light. You cannot see your hand. Paper is translucent. (Explain transparent, translucent, and opaque).

3. Rattle it. (Radio sound effects men use paper of various qualities to make such sounds as forest fire, storm, ice).

4. Snap it. (Paper comes from Egyptian papyrus, a reed which was used to make early paper. Explain history of paper. Remind class that wasp made paper before man and that we get many things from insects--including the hypodermic needle which is copied from the bee's stinger).

5. Fold it--note that creases do not come out. (Quickly review how paper is made, kinds of paper, and the story of a tree from the forest through the mill).

6. Roll it--watch it uncurl on hand. (Mention that man's idea of telescope came from this. Mention famous documents that we have including the ten commandments, if you wish. Be sure to include the care the Smithsonian takes of the Declaration of Independence. Talk of the printing press and modern man's dependence upon paper).

7. Crush it in the hands, rolling it into a small ball. Straighten it out and repeat the six activities to see that paper has lost its resiliency. Compare to tissues or cloth. Measure it against the page which has not been used. Let students explain its loss of size

COLLECT THE PAPER THAT HAS BEEN PLAYED WITH IN A WASTEBASKET

Let pupils begin working on second sheet as soon as they have an idea. Idea may be presented in any form: poems, pictures, cartoons, summary of activities, story of a sheet of paper, advertisements, paper in everyday life, letters, diaries.

Individuals or small groups may be permitted to go to the library for

reference materials. Any pupil sufficiently interested may take more than the remainder of the period to complete the activity.

Papers are read by the instructor and comments made on them:

Original
Worth rewriting
Could be expanded
Copy for presentation to school paper, etc.

Post interesting reactions and read to the class unusually effective responses.

Follow with a composition lesson to utilize the materials in the lesson in explanation, description, or narration.

Ask a student committee to prepare a scrapbook of the most interesting results. (Materials can be put into form for this)

(Original idea from Blohm, Albert and Raubicheck, Chas. W., ADVENTURES IN THOUGHT AND EXPRESSION: A Course in Creative Writing, 1932, Prentice-Hall, Inc. Used by permission of the publisher)

APPLES would lend themselves equally to this type of a motivating lesson to combine science and language arts.

LESSON ON RESPONSE TO MOOD

Class: 8th Grade

Unit: Responding with Imagination

Previous Activity: Students had been engaged in various speaking and writing experiences in which they had attempted to respond to sensory impressions.

Time: Approximately two hours

Objectives:

A. To develop the desire to write interestingly and descriptively
B. To increase powers of observation and imagination
C. To improve effective use of:

1. adverbs, adjectives, and sensory detail
2. the precise word to convey the meaning and mood desired

COMMENTS	ACTIVITIES
	A. Introduction to experiment in "Mood".
Preparation of the class is important. Here the teacher summarizes what she plans to say.	1. Today we are going to conduct an experiment in which each of you will play a vital part. It is important that each of you listen to directions and follow them carefully if the experiment is to be successful.
	2. We are going to listen to a record.
	a. While the record is playing, shut your eyes and allow your mind to wander . . . .
	1) Ask youself, of what does this music make me think?
	2) What words express the mood I feel, or the mood of the record?
	b. After you have listened to the record for five minutes, begin to write, on a clean sheet of binder paper - not to be handed in - the words and phrases which come into your mind as you listen to the music.
	1) At this point, do not worry about spelling, punctuation, sentence structure or even process.
	2) Think only of the music and the idea which it brings to mind.
	B. Listening to recording of "Spellbound". Discussion of responses to record.

Here the teacher relies on established table groupings.

The activity provides variation from listening and gives all students an opportunity to share ideas.

1. Listen carefully to the following directions:
   a. Will each table chairman ask each person at his table to read aloud the responses he made to the record.
   b. Will the chairman ask each person at his table to select at least three responses which he considers to be most interesting.
   c. A recorder should be appointed to write down five words or phrases which the group selects as the most descriptive, appropriate and interesting.
   d. In ten minutes each recorder will be asked to read the responses selected by his group.
   e. REMEMBER TO TALK QUIETLY, TO WORK QUICKLY AND EFFICIENTLY.

Less detailed directions might be appropriate in many classes. This class tended to be difficult to control and teacher found the reminders to be helpful. Teacher tries to pull together and summarize responses. Note that teacher has clear picture of ultimate understanding here even though response is to be elicited from students.

2. Recitation of responses by recorders

   Will the recorder at Table I please stand and read so that everyone can hear the responses selected by his table, etc.

3. Each of you has participated in the creation of mood. The record "Spellbound", like beauty, may mean something different to each of us. Whatever it may mean, we must admit that it creates a "mood" for each of us. That is why a record like "Spellbound" is called mood music.
   a. Who can define the word "mood"?
   b. Mood implies a "particular" state of mind, especially one affected by emotion -- as to be in the mood to work.

C. Moods created in pictures.

1. You all remember the picture shown you earlier in this unit.
   a. What was the mood in that picture? (unhappiness)
   b. What elements created this mood? (expressions, color)

Second phase of lesson begins with allusion to earlier writing.

2. Now will each of you choose one word or phrase from the following list which you think best describes the picture

which I am now holding (a foggy harbor).

Here teacher attempts to predict student responses. However, she must be ready to handle.

a. mysterious
b. calm, still, undisturbed, tranquil
c. gloomy and depressing
d. death-like

3. How many of you selected mysterious? Why?
How many of you selected b? Why?

4. What elements create mood in this picture?

a. stillness, lack of life, motion
b. water is still, without a ripple
c. the fog lends a hushed quality

D. Moods created in writing

1. (DISTRIBUTE COPIES OF POEMS). Follow along with me while I read how two writers give different moods to the same element -- FOG.

a. "It lies cold on the eyeballs and thick in the throat; it is an intangible blanket saturated with the stillness and the heaviness of death."
b. Sandburg's "Fog"

Use of printed text as a listening aid reduced distraction

2. Listen and react to the way Poe creates a mood for a knock on the door in this poem, "The Raven". (Play recording Edgar Allan Poe, "The Raven", by Basil Rathbone).

a. What words "set up the stage for a knock on the door?"
b. (Midnight dreary, weak, weary, napping bleak December dying ember, wrought its ghost). What do these words describe?

Again teacher predicts reasonable response but is prepared to "fish".

1) time
2) mood of the subject
3) activity
4) season - time of year
5) weather

E. Assignment:

1. Now for the assignment tonight you are to describe a knock on the door, too. Create three different moods:

Papers give teacher opportunity to evaluate effectiveness of total lesson.

a. Write to show it's a desperate fugitive.
b. Write to show it's a girl's boyfriend.
c. Write to show it's a messenger boy.

2. Listen carefully to the knock on our door. Who wants to try knocking in different ways? (Volunteers) Pay careful attention to describing (Rule c. above)

Materials I plan to use

A. Recordings

1. Spellbound
2. Edgar Allan Poe -- Basil Rathbone

B. Photograph: Foggy Harbor from Holiday Magazine.

C. Copies of poetry anthology, in Prose and Poetry.

1. Fog
2. Bells
3. Knocking

SUBJECT MATTER AND CREATIVITY

Teaching through creativity is not the only way to teach. Some activities lend themselves best to a structured classroom and drill. Playing instrumental music might well be such a subject. Creative activities here would be only in taking the individual instrument to show what can be done with it, or in preparing a program. When an orchestra is playing, one does not want a musician to branch out on his own.

In shop courses, however, each student will be doing creative work. In the first year class the pupil must make a useful object, but he may use his own ideas for design. If he sees something he wishes to make, he may look at it, measure it, study it, but that is as far as copying goes. He works out his own plans, finds his own costs, and gets his material. He may build what he wishes so long as he can afford his project and get it out of the building.

Much homemaking is creative. An elementary teacher combined science, math, nutrition, homemaking and language arts in the following project. The students made their chef caps and aprons. They studied about yeast and how it works. They divided the recipe to make a small amount. They brought ingredients and made bread, took it to the school kitchen, baked it, had it for lunch and then described the process in a composition. A similar project was one on churning butter.

Varying recipes, making up new food combinations, planning menus around color, texture, nutrition, etc., all lend themselves to creative activities.

In clothing there are equally many possibilities for varying patterns, designing clothes, preparing posters and bulletin boards showing the effect of certain ideas upon figures, etc.

One can even teach participles in English by the use of a menu where every adjective shows what has been done to a food (fried chicken).

Creativity will never be the primary source of all progress but it has traditionally stood for the elusive quality that produced man's greatest achievements. Furthermore, it is the source of man's greatest content and accomplishment at every level of endeavor. Do you want your children to enjoy while learning in your class? MAKE SOME OF YOUR LESSONS CREATIVE ONES.

SOME OF THE MOST IMPORTANT FACILITATING PROCEDURES
FOR THE DEVELOPMENT OF CREATIVITY

1. Rewarding varied kinds of talents and creative achievements.
2. Helping children recognize the value of their creative talents.
3. Teaching children to use creative problem-solving processes.
4. Developing creative acceptance of realistic limitations in a problem situation.
5. Avoiding the equation of divergency with mental illness and delinquency.
6. Modifying the misplaced emphasis on sex roles.
7. Helping highly creative children become less objectionable.
8. Developing school pride in creative achievement.
9. Reducing the isolation of highly creative children.
10. Providing sponsors or patrons for certain highly creative children.
11. Developing values and purposes.
12. Helping highly creative children to develop courage and to tolerate the anxieties of being in the small minority, of exploring the uncertain, etc.
13. Helping highly creative children learn to cope with anxieties and fears.
14. Reducing the discontinuities that seem to be associated with entrance into kindergarten, the fourth grade, and the seventh grade.

CREATIVE SCIENCE SCALE:

1. Giving an original paper at a scientific meeting sponsored by a professional society.
2. Winning a prize or award in a scientific talent search.
3. Constructing scientific apparatus on one's own initiative.
4. Inventing a patentable device.
5. Having a scientific paper published in a science journal.

Dont Get Perconel with a chicken

My Gran father learned me dont get percone1 with a chicken. My Gran father has a few chickens and one was a chicken I got percone1 with and gave the name Gene Autry. One day my gran mother deside to have stood chicken for dinner. Low and behole my gran father took a pole with a wire on the end and got Gene Autry by the leg and before I cood say a werd he rung his neck. He was a brown one. So dont get percone1 with a chicken. IT was like eating my own rellatives.

BIBLIOGRAPHY

Torrance, E. Paul, GUIDING CREATIVE TALENT, Prentice-Hall, Inc., 1964

Torrance, E. Paul, EDUCATION AND THE CREATIVE POTENTIAL, University of Minnesota Press, 1964

Applegate, Mauree, FREEING CHILDREN TO WRITE, Harper & Row, 1963

Osborn, Alex F., APPLIED IMAGINATION, Charles Scribner's Sons, 1963

Gordon, Wm. J. J., SYNECTICS, Harper & Row, 1961

National Education Association, Aschner, Mary Jane & Bish, Charles, PRODUCTIVE THINKING IN EDUCATION, 1965

Taylor, Calvin W., CREATIVITY: PROGRESS AND POTENTIAL, McGraw-Hill, 1964

Holt, John, HOW CHILDREN FAIL, Delta, 1964

Wolfe, Don, CREATIVE WAYS TO TEACH ENGLISH, Odyssey Press

Andrews, Gladys, CREATIVE RHYTHMIC MOVEMENT FOR CHILDREN, Prentice-Hall, Inc.

Blohm, Albert & Raubicheck, Charles W., ADVENTURES IN THOUGHT AND EXPRESSION, Prentice-Hall, Inc., 1932

Taylor, Calvin W., "The Creative Child" LOOK Magazine, 11/7/61

Crane, L. D., "Creativity in the Classroom", Speech to new teachers, 1/21/64

Hirst, Dr. Wilma, Summary of Findings on Identifying and Working with Creative Students

PLUS, SPARK, PROBE, SPICE (Classroom aids in arithmetic, social studies, science, and language arts), Educational Service, Inc.

Use of Sound

Album One, SOUNDS AND IMAGES Elementary version), E. Paul Torrance, Ginn and Company